

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A program for projecting a predetermined image onto a character of a game in a game machine having an operation unit for executing predetermined operation in a screen, a calculation processing unit for executing predetermined calculation, and a control unit connected with the operation unit and the calculation processing unit and for controlling the calculation processing unit, the program encoded in computer readable medium and configured to be executed by the game machine, the program comprising:

an image creation process which creates an image consisting of two-dimensional coordinates with the control unit by operating the operation unit; and

a pasting process which arranges the image created by the image creation process and a virtual light source for projecting the image onto a character at an arbitrary position in the vicinity of the character in a three-dimensional virtual space, based on an input signal from the operation unit, and for pasting on the character a projected image created by projecting the image onto the character from the projected virtual light source, wherein

the pasting process pastes on the character the projected image such that the projected image projected on only a projection plane closest to [[a viewpoint]] the virtual light source remains after the character is pasted on all the projected plane on which the projected image is projected by projecting processing using a light matrix, view matrix, and a projection matrix, and

the pasting process creates the view matrix using the light matrix and the projection matrix.

2. (Currently Amended) The program according to claim 1, wherein

the character is constituted by a combination of a plurality of parts;

at least one of the parts is designated as a projection target in response to the operation of the operation unit; and

the pasting process pastes the projected image to the designated part by the control unit.

3. (Currently Amended) A game machine having an operation unit for executing a predetermined operation in a screen, calculation processing unit for executing a predetermined calculation, and control unit connected with the operation unit and the calculation processing unit and for controlling the calculation processing unit, the game machine for projecting a predetermined image onto a character of a game, comprising:

an image creation unit which creates an image consisting of two-dimensional coordinates with the control means by operating the operation means; and

a pasting unit which arranges the image created by the image creation unit and a virtual light source for projecting the image onto a character at an arbitrary position in the vicinity of the character in a three-dimensional virtual space, based on an input signal from the operation unit, and pastes on the character a projected image created by projecting the image onto the character from the projected virtual light source, wherein

the pasting unit pastes on the character the projected image such that the projected image projected on only a projection plane closest to [[a viewpoint]] the virtual light source remains, after the character is pasted on all the projected plane on which the projected image is projected by projecting processing using a light matrix, view matrix, and a projection matrix, and

the pasting process creates the view matrix using the light matrix and the projection matrix.

4. (previously presented) The game machine according to claim 3,

wherein the character is constituted by a combination of a plurality of parts;

at least one of the parts is designated as a projection target in response to the operation of the operation unit; and

the pasting unit pastes the projected image to the designated part by the control unit.

5. (cancelled)

6. (cancelled)

7. (Currently Amended) An image display control program for operating a computer as image data creation unit for creating image data for displaying on a display device an object image created by projecting a predetermined projection image onto an object consisting of three-dimensional coordinates in a three-dimensional virtual space, the image display control program being in a computer readable medium and configured to be executed by a control unit of the computer, the image display control program comprising:

creating predetermined projection image data to be projected onto the object;

arranging the object and the projection image in the virtual space;

determining, based on operation of an operator, the relative position of the projection image to the object and the position of a virtual light source which projects the projection image onto the object;

calculating the distance between the virtual light source and a projection plane containing the projection position on the object, and calculating the projection plane of the object, onto which the projection image is projected, removing from the projection image a projection plane beyond a predetermined distance from the virtual light source

after the character is pasted on all the projected plane on which the projected image is projected by projecting processing using a light matrix, view matrix, and a projection matrix;

projecting the projection image onto the projection plane with the virtual light source as a viewpoint, and pasting the projection image to the projection plane of the object, the projecting process pastes on the characters the projected image such that the projected image projected on only a projection image closes to the virtual light source remains; and

creating object image data for the object to which the projection image is pasted,

wherein the view matrix is created using the light matrix and the projection matrix.

8. (previously presented) The image display control program according to claim 7, further comprising:

creating image data of the projection image by the control unit, based on a operation signal inputted from an operating unit by a user.

9. (previously presented) The image display control program according to claim 7 further comprising:

projecting the projection image onto a transparent object having a same or an approximately same shape as that of the object and pasting the projection image to the transparent object, by the control unit; and

causing the display device to display the transparent object to which the projection image is pasted, in such a manner as to be superimposed on the object, by the control unit.

10. (previously presented) The image display control program of claim 7, further comprising:

the program is operable to effect a function of changing the transparency degree of the projection object depending on the determination of the relation between the positions of the virtual light source, the projection object and the object that deformation of projection image pasted to the object by the control unit.

11. (previously presented) The image display control program of claim 7, further comprising:

the object consists of a combination of a plurality of parts, and wherein

least one of the parts as a projection target of the projection image in response to operation of an operator, and pasting the projection image to the designated part(s).

12. (Currently Amended) An image display control program for operating a computer as image data creation unit for creating image data for displaying on a display device an object image created by projecting a predetermined projection image onto an object consisting of three-dimensional coordinates in a three-dimensional virtual space, the image display control program being encoded in computer readable medium and configured to be executed by the computer, the image display control program comprising:

creating predetermined projection image data to be projected onto the object;

arranging the object and the projection image in the virtual space;

determining, based on operation of an operator, the relative position of the projection image to the object and the position of a virtual light source which projects the projection image onto the object;

calculating for each pixel respectively the distance between the virtual light source and a projection plane containing the projection position on the object, projecting with the virtual light source as a viewpoint the pixels of the projection image onto the pixels on the projection plane closest to the viewpoint, and pasting the projection image onto the projection plane of the object after the character is pasted on all the projected plane on which the projected image is projected by projecting processing using a light matrix, view matrix, and a projection matrix, the calculating process pastes on the characters the projected image such that the projected image projected on only a projection image closes to the virtual light source remains; and

creating object image data for the object to which the projection image is pasted,

wherein the view matrix is created using the light matrix and the projection matrix.

13. (previously presented) The image display control program of claim 8, further comprising:

changing the transparency degree of the projection object depending on the determination of the relation between the positions of the virtual light source, the projection object and the object resulting from the projection image pasted to the object.

14. (previously presented) The image display control program of claim 9, further comprising:

changing the transparency degree of the projection object depending on the determination of the relation between the positions of the virtual light source, the projection object and the object resulting from the projection image pasted to the object.

15. (previously presented) The image display control program of claim 8, wherein the object consists of a combination of a plurality of parts, and further comprising:

designating at least one of the parts as a projection target of the projection image in response to operation of an operator, and pasting the projection image to the designated part(s).

16. (previously presented) The image display control program of claim 9, wherein the object consists of a combination of plurality of parts, and further comprising:
designating at least one of the parts as a projection target of the projection image in response to operation of an operator, and pasting the projection image to the designated part(s).

17. (previously presented) The image display control program of claim 10,
wherein the object consists of a combination of a plurality of parts, and further comprising:
designating at least one of the parts as a projection target of the projection image in response to operation of an operator, and pasting the projection image to the designated part(s).